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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,190	07/19/2001	Jan Kransmo	27943-00418	9134
27045	7590	11/15/2007	EXAMINER	
ERICSSON INC. 6300 LEGACY DRIVE M/S EVR 1-C-11 PLANO, TX 75024			HO, CHUONG T	
			ART UNIT	PAPER NUMBER
			2619	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/909,190	<b>Applicant(s)</b> KRANS MO ET AL.	
	<b>Examiner</b> CHUONG T. HO	<b>Art Unit</b> 2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 3,4,7,14,16,17,24,27,28,32 and 33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-4, 7, 14, 16-17, 24, 27-28, 32-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. The amendment filed 08/30/07 have been entered and made of record.
2. Applicant's arguments with respect to claims 3-4, 7, 14, 16-17, 24, 27-28, 32-33 have been considered but are moot in view of the new ground(s) of rejection.
3. Claims 3-4, 7, 14, 16-17, 24, 27-28, 32-33 are pending.

**Claim Rejections - 35 USC § 103**

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 4, 7, 14, 16, 17, 32, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laiho (U.S. Patent No. 6,061,572) in view of Bender et al. (U.S. Patent No. 6,961,329 B1).

As to claim 3, Laiho discloses a telecommunication system for delivering a Short Message Service (SMS) message within a network capable of providing both voice services on a voice carrier and data services on a data only carrier, said telecommunication system comprising:

A mobile station (MS) supporting both voice services and data services, said MS being currently involved in a data session on said data only carrier (col. 1, line 56; col. 1, line 63; col. 3, lines 39-40);

A node in wireless communication with said MS for receiving said SMS message encapsulating said SMS message into an Internet Protocol (IP) packet and routing said SMS message to said MS as an electronic mail message over said data only carrier without disrupting said data session (col. 3, lines 45-51);

Wherein said node further operates to check whether said MS is involved in said data session prior to encapsulating said SMS message into said IP packet, said node transmitting said SMS message to said MS when said MS is not involved in said data session (col. 3, lines 37-38).

However, Laiho (6,061,572) is silent to disclosing wherein said MS transmits to said node a feature code indicating that said MS is in data mode when said data session begins, said node encapsulating said SMS message into said IP packet only when said node has received said feature code.

Bender et al. (6,961,329) discloses MS (figure 1, access terminal) transmits to said node a feature code indicating that said MS is in data mode when said data session begins (registered CDMA message with HDR BSC) , said node encapsulating said SMS message into said IP packet only when said node has received said feature code (col. 1, lines 66-67, multi-mode access terminal can be designed to communicate with multiple radio networks such as IS-2000 CDMA to provide voice service, HDR radio network to provide packet data services) (col. 8, lines 11-12, if the access terminal has registered with the CDMA radio network, unsolicited CDMA messages (e.g., paging request messages) are sent by the MSC to the CDMA radio network..., and can be sent by either the MSC or the CDMA BSC to the HDR BSC ) (col. 8, lines 28-32, the HDR

radio network receives the unsolicited CDMA message and identifies message for each access terminal "the access terminal on data mode". If a particular access terminal previously indicated that it is interested in receiving unsolicited CDMA messages, then the HDR radio network encapsulated each message received for this access terminal. The HDR radio network continues to send unsolicited CDMA message to the access terminal until a STOPENcapsulateCDMA message is received from the access terminal (the access terminal switches to "voice mode").

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate wherein said MS transmits to said node a feature code indicating that said MS is in data mode when said data session begins, said node encapsulating said SMS message into said IP packet only when said node has received said feature code taught by Bender into the system of Laiho. One would have been motivated to do so to allow the subscriber may then leave the data mode he is in and take the incoming call. He can then go back and finish the ongoing call in the voice mode.

6. As to claim 4, Bender (U.S. Patent No. 6,961,329 B1) discloses wherein said node is a Mobile Service Switching Center (see figure 1, col. 8, lines 15-35 HDR BSC).

7. As to claim 7, Bender discloses wherein said node is a base station controller (see figure 1, col. 8, lines 15-35 HDR BSC).

8. As to claim 16, Laiho discloses a Mobile Service Switching Center for delivering a Short Message Service (SMS) message to a mobile station (MS) supporting both voice services and data services, said Mobile Services Switching Center comprising:

means for determining whether said MS is currently involved in data session on a data only carrier (col. 1, line 56, col. 1, line 63; col. 3, lines 39-40; col. 3, line 43 – cause code);

Conversion logic for encapsulating said SMS message into an Internet Protocol (IP) packet and routing said SMS message to said MS over said data only carrier as an electronic mail message when said MS is involved in said data session (col. 3, lines 45-51).

However, Laiho is silent to disclosing wherein said means for determining comprises a feature code indicating that said MS is involved in said data session, said feature code being sent by said MS at the start of said data session.

Bender et al. (6,961,329) discloses MS (figure 1, access terminal) transmits to said node a feature code indicating that said MS is in data mode when said data session begins (registered CDMA message with HDR BSC) , said node encapsulating said SMS message into said IP packet only when said node has received said feature code (col. 1, lines 66-67, multi-mode access terminal can be designed to communicate with multiple radio networks such as IS-2000 CDMA to provide voice service, HDR radio network to provide packet data services) (col. 8, lines 11-12, if the access terminal has registered with the CDMA radio network, unsolicited CDMA messages (e.g., paging request messages) are sent by the MSC to the CDMA radio network..., and can be sent by either the MSC or the CDMA BSC to the HDR BSC ) (col. 8, lines 28-32, the HDR radio network receives the unsolicited CDMA message and identifies message for each access terminal "the access terminal on data mode". If a particular access terminal

previously indicated that it is interested in receiving unsolicited CDMA messages, then the HDR radio network encapsulated each message received for this access terminal. The HDR radio network continues to send unsolicited CDMA message to the access terminal until a STOPEncapsulateCDMA message is received from the access terminal (the access terminal switches to "voice mode").

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate wherein said MS transmits to said node a feature code indicating that said MS is in data mode when said data session begins, said node encapsulating said SMS message into said IP packet only when said node has received said feature code taught by Bender into the system of Laiho. One would have been motivated to do so to allow the subscriber may then leave the data mode he is in and take the incoming call. He can then go back and finish the ongoing call in the voice mode.

9. As to claim 17, Bender et al. (U.S. Patent No. 6,961,329 B1) discloses wherein said feature code is stored in a Visitor Location Register associated with said Mobile Service Switching Center (Mobile Switching Center, MSC) (col. 8, lines 15-35, figures 3-4).

10. As to claim 32, Laiho discloses a method for delivering a Short Message Service (SMS) message within a network capable of providing both voice services on a voice carrier and data services on a data only carrier, said method comprising:

Receiving at a node in wireless communication with a mobile station (MS) supporting both voice services and data services said SMS message (col. 1, line 56; col. 1, line 63; col. 3, lines 39-40;

Determining whether said MS is currently involved in a data session on said data only carrier (col. 3, line 43 – cause code);

If not, routing said SMS message to said MS via said voice carrier (col.3, lines 38-40);

If so, encapsulating said SMS message into an Internet Protocol (IP) packet, and routing said SMS message to said MS as an electronic mail message without disrupting said data session (col. 3, lines 40-41, lines 46-51).

However, Laiho (6,061,572) is silent to disclosing wherein said MS transmits to said node a feature code indicating that said MS is in data mode when said data session begins from said MS to said node.

Bender et al. (6,961,329) discloses MS (figure 1, access terminal) transmits to said node a feature code indicating that said MS is in data mode when said data session begins (registered CDMA message with HDR BSC) , said node encapsulating said SMS message into said IP packet only when said node has received said feature code (col. 1, lines 66-67, multi-mode access terminal can be designed to communicate with multiple radio networks such as IS-2000 CDMA to provide voice service, HDR radio network to provide packet data services) (col. 8, lines 11-12, if the access terminal has registered with the CDMA radio network, unsolicited CDMA messages (e.g., paging request messages) are sent by the MSC to the CDMA radio network..., and can be sent by either the MSC or the CDMA BSC to the HDR BSC ) (col. 8, lines 28-32, the HDR



radio network receives the unsolicited CDMA message and identifies message for each access terminal "the access terminal on data mode". If a particular access terminal previously indicated that it is interested in receiving unsolicited CDMA messages, then the HDR radio network encapsulated each message received for this access terminal. The HDR radio network continues to send unsolicited CDMA message to the access terminal until a STOPEncapsulateCDMA message is received from the access terminal (the access terminal switches to "voice mode").

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate wherein said MS transmits to said node a feature code indicating that said MS is in data mode when said data session begins, said node encapsulating said SMS message into said IP packet only when said node has received said feature code taught by Bender into the system of Laiho. One would have been motivated to do so to allow the subscriber may then leave the data mode he is in and take the incoming call. He can then go back and finish the ongoing call in the voice mode.

11. As to claim 33, Bender discloses storing said feature code within a Visitor Location Register associated with said Mobile Service Switching Center (col. 1, lines 66-67, multi-mode access terminal can be designed to communicate with multiple radio networks such as IS-2000 CDMA to provide voice service, HDR radio network to provide packet data services) (col. 8, lines 11-12, if the access terminal has registered with the CDMA radio network, unsolicited CDMA messages (e.g., paging request messages) are sent by the MSC to the CDMA radio network..., and can be sent by

either the MSC or the CDMA BSC to the HDR BSC ) (col. 8, lines 28-32, the HDR radio network receives the unsolicited CDMA message and identifies message for each access terminal "the access terminal on data mode". If a particular access terminal previously indicated that it is interested in receiving unsolicited CDMA messages, then the HDR radio network encapsulated each message received for this access terminal. The HDR radio network continues to send unsolicited CDMA message to the access terminal until a STOPEncapsulateCDMA message is received from the access terminal (the access terminal switches to "voice mode").

12. As to claim 14, Bender et al. discloses wherein said network is a Code Division Multiple Access 2000 network. (col. 27, line 39).

13. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Laiho (U.S. Patent No. 6,061,572) in view of Bender et al. (U.S. Patent No. 6,961,329 B1).

As to claim 24, Laiho discloses a system for delivering a Short Message Service (SMS) message to a mobile station (MS) supporting both voice services and data services, said system comprising:

Means for determining whether said MS is currently involved in a data session on a data only carrier (col. 1, lines 56, col. 1, line 63, col.3, lines 39-40, col. 3, line 43 – cause code);

Conversion logic for encapsulating said SMS message into an Internet Protocol (IP) packet and routing said SMS message to said MS over said data only carrier as an

electronic mail message when said MS is involved in said data session (col.3, lines 45-51).

However, Laiho fails to disclose that the system is a Base Station Controller.

Bender et al. discloses that the system is a Base Station Controller; Wherein said means for determining comprises a feature code indicating that said MS is involved in said data session, said feature code being sent by said MS at the start of said data session (col. 1, lines 66-67, multi-mode access terminal can be designed to communicate with multiple radio networks such as IS-2000 CDMA to provide voice service, HDR radio network to provide packet data services) (col. 8, lines 11-12, if the access terminal has registered with the CDMA radio network, unsolicited CDMA messages (e.g., paging request messages) are sent by the MSC to the CDMA radio network..., and can be sent by either the MSC or the CDMA BSC to the HDR BSC ) (col. 8, lines 28-32, the HDR radio network receives the unsolicited CDMA message and identifies message for each access terminal "the access terminal on data mode". If a particular access terminal previously indicated that it is interested in receiving unsolicited CDMA messages, then the HDR radio network encapsulated each message received for this access terminal. The HDR radio network continues to send unsolicited CDMA message to the access terminal until a STOPEncapsulateCDMA message is received from the access terminal (the access terminal switches to "voice mode").

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate wherein said MS transmits to said node a feature code indicating that said MS is in data mode when said data session begins, said node

encapsulating said SMS message into said IP packet only when said node has received said feature code taught by Bender into the system of Laiho. One would have been motivated to do so to allow the subscriber may then leave the data mode he is in and take the incoming call. He can then go back and finish the ongoing call in the voice mode.

14. Claims 27, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laiho (U.S. Patent No. 6,061,572) in view of Bender et al. (U.S. Patent No. 6,961,329) and in further view of Spielman et al. (U.S. Patent No. 6,560,318).

As to claim 27, Laiho discloses a system for delivering a Short Message Service (SMS) message to a mobile station (MS) supporting both voice services and data services, said system comprising:

Means for determining whether said MS is currently involved in a data session on a day only carrier (col. 1, lines 56, col. 1, line 63, col. 3, lines 39-40, col. 3, line 43 – cause code);

Conversion logic for encapsulating said SMS message into an Internet Protocol (IP) packet and routing said SMS message to said MS over said data only carrier as an electronic mail message when said MS is involved in said data session (col. 3, lines 45-51).

However, Laiho fails to disclose that the system is a Base Station Controller.

Bender discloses that the system is a Base Station Controller (col. 1, lines 66-67, multi-mode access terminal can be designed to communicate with multiple radio networks such as IS-2000 CDMA to provide voice service, HDR radio network to provide packet data services) (col. 8, lines 11-12, if the access terminal has registered with the CDMA radio network, unsolicited CDMA messages (e.g., paging request messages) are sent by the MSC to the CDMA radio network..., and can be sent by either the MSC or the CDMA BSC to the HDR BSC ) (col. 8, lines 28-32, the HDR radio network receives the unsolicited CDMA message and identifies message for each access terminal "the access terminal on data mode". If a particular access terminal previously indicated that it is interested in receiving unsolicited CDMA messages, then the HDR radio network encapsulated each message received for this access terminal. The HDR radio network continues to send unsolicited CDMA message to the access terminal until a STOPEncapsulateCDMA message is received from the access terminal (the access terminal switches to "voice mode").

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate wherein said MS transmits to said node a feature code indicating that said MS is in data mode when said data session begins, said node encapsulating said SMS message into said IP packet only when said node has received said feature code taught by Bender into the system of Laiho. One would have been motivated to do so to allow the subscriber may then leave the data mode he is in and take the incoming call. He can then go back and finish the ongoing call in the voice mode.

However, the combined system (Laiho – Bender) are silent to disclosing wherein said conversion logic tags said electronic mail message with a received indicator, said received indicator generating a response message to said Base Station Controller when said MS opens said electronic mail message.

Spielman et al. discloses wherein said conversion logic tags said electronic mail message with a received indicator, said received indicator generating a response message to said Base Station Controller when said MS opens said electronic mail message (figure 1, SMS, col. 11, lines 15-25, The notification attribute 82f is another example of a first object class where two notification device tags (MWI=8945551212, PAGER=user@page.network.com) are stored for notification via a message waiting indicator and a pager. Since the paging protocol uses SMTP, the pager notification device tag has sufficient information for generation of the notification message for the corresponding pager to receive the page as an e-mail client via the notification delivery process 14a. In addition, the notification attribute 82f illustrates that multiple device tags may be used to send a notification to respective multiple devices in response to the corresponding and, namely reception of an urgent voicemail message).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate wherein said node tags said electronic mail message with a received indicator, said received indicator generate a response message to said node when said MS opens said electronic mail message, said node transmitting a delivery notification to said Short Message Service Center upon receipt said response message taught by Spielman into the combined system (Laiho - Bender). One would have been

motivated to do so to provide notification information for non-local devices due to the nature in which the subscriber preference information and device information are stored and managed in the subscriber directory.

15. As to claim 28, Spielman et al. discloses transmitting a delivery notification message to said Short Message Service Center upon receipt of said response message (figure 1, SMS, col. 11, lines 15-25, The notification attribute 82f is another example of a first object class where two notification device tags (MWI=8945551212, PAGER=user@page.network.com) are stored for notification via a message waiting indicator and a pager. Since the paging protocol uses SMTP, the pager notification device tag has sufficient information for generation of the notification message for the corresponding pager to receive the page as an e-mail client via the notification delivery process 14a. In addition, the notification attribute 82f illustrates that multiple device tags may be used to send a notification to respective multiple devices in response to the corresponding and, namely reception of an urgent voicemail message).

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUONG T. HO whose telephone number is (571) 272-3133. The examiner can normally be reached on 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ORGAD EDAN can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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11/09/07

EDAN . ORGAD  
SUPERVISORY PATENT EXAMINER

*Edna Orgad* 11/13/07